

CLAIM LISTING

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 – 18. (Cancelled)

19. (New) An adhesive composition comprising an amount of an adhesive and an amount of at least one additive, characterized in that the additive comprises:

a. at least one homopolymer of an α,β -unsaturated monocarboxylic acrylic acid having 3-5 carbon atoms, which corresponds to formula I:



wherein R is a substituent selected from the group of H, monovalent alkyl, aryl, alkylaryl radicals, monovalent cyclo alkyl radicals, alkoxy, haloalkyl, cyanoalkyl containing 1 to 9 carbon atoms,

b. or at least one copolymer thereof with at least one alkyl acrylate represented by formula II



in which R' is selected from the group of H, methyl, ethyl and with an additive where R'' is a C10-C30 alkyl group,

the at least one homo- or copolymer being cross-linked with a cross-linking agent which is a polyfunctional alkylalkylene or a polyfunctional alkyalkylidene monomer containing at least two terminal methylene $\text{CH}_2=\text{C}$ groups, and having a molecular weight of between 0.05 – 100 billion Dalton.

20. (New) The adhesive composition of claim 19, characterized in that the homo- or copolymer is cross-linked with a cross-linking agent which is a polyfunctional vinylidene monomer.

21. (New) The adhesive composition of claim 19, characterized in that the at least one homo- or copolymer is cross-linked with a cross-linking agent having a molecular weight of between 0.5 – 10 billion Dalton.

22. (New) The adhesive composition of claim 19, characterized in that the at least one homo- or copolymer is cross-linked with a cross-linking agent having a molecular weight of between 1 - 5 billion Dalton.

23. (New) The adhesive composition of claim 19, characterized in that the at least one homo- or copolymer is a polymer of acrylic acid or methacrylic acid.

24. (New) The adhesive composition of claim 19, characterized in that in formula II, R" is a C10-C20 alkyl group.

25. (New) The adhesive composition of claim 19, characterized in that the cross-linking agent is a polyalkenyl polyether.

26. (New) The adhesive composition of claim 25, characterized in that the cross-linking agent is an allylpentaerythritol.

27. (New) The adhesive composition of claim 19, characterized in that the adhesive composition is a pseudo plastic material.

28. (New) The adhesive composition of claim 19, characterized in that the adhesive composition is an adhesive composition based on starch, cellulose, pea originating cellulose or a polyvinylacetate adhesive composition or a mixture of two or more of these.

29. (New) The adhesive composition of claim 19, characterized in that the composition contains at least 0.001 wt. %, preferably at least 0.05 wt. % of the at least one

additive, and less than 5 wt. %, preferably less than 1 wt. %, more preferably less than 0.5 wt. % of the at least one additive with respect to the total weight of the adhesive composition.

30. (New) The adhesive composition of claim 19, characterized in that the composition contains between 0.5-50 parts by weight of starch, between 0.01 – 2.5 parts by weight of alkali hydroxide, between 0.01-2 parts by weight of borax and between 80-150 parts by weight of water.

31. (New) A process for producing the adhesive composition as claimed in claim 19, characterized in that the at least one additive as claimed in any one of claims 1-11 is first diluted with starch, cellulose or a polyvinylacetate adhesive in a weight ratio of 75-100, preferably 90-95 parts by weight of starch, 0.5-10 and 1-10, preferably 4-9 parts of polyacrylate, and thereafter mixed with the adhesive composition.

32. (New) The process of claim 31, characterized in that 1-5 parts of optical clarification agent is added to the adhesive composition.

33. (New) A process for the production of laminated corrugated paper or card board, comprising a plurality of super imposed layers of corrugated paper or card connected together by intermittent flat sheets of paper, characterized in that an amount of the adhesive composition according to claim 19 is applied to the top of the corrugations, where after the layers are adhered to each other under pressure.

34. (New) Paper board or card board comprising a plurality of super imposed layers of corrugated paper or card connected together by intermittent flat sheets of paper, characterized in that the layers are adhered to each other by means of the adhesive composition as claimed in claim 19.

35. (New) A compact paper or card board comprising a plurality of super imposed layers of paper or card, which are adhered to each other by means of the adhesive composition of claim 19.

36. (New) Paper comprising an amount of the adhesive composition as claimed in claim 19.

37. (New) A process for the production of compact paper or card board comprising a plurality of super imposed layers of paper or card, characterized in that an amount of the adhesive composition of claim 19 is applied to the layers, where after the layers are adhered to each other under pressure.

38. (New) A solid premix which is characterized in that it contains about 5-50, preferably 10-30 parts of alkali, preferably caustic soda, about 200-750, preferably 350-550 parts of starch powder, about 0.01-5 and preferably 0.5-2.5 parts of the at least one additive claimed in claim 19.

39. (New) The solid premix of claim 38, characterized in that the solid premix further contains about 20-80, preferably 40-60 parts of gelatinised starch.

40. (New) The solid premix of claim 38, characterized in that the premix contains about 1-25, preferably 5-15 parts of a buffer.

41. (New) The solid premix of claim 40, characterized in that borax is used as the buffer.